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Farm Youth

Cooperative Extension Work in Agriculture and Home Economics

Extension Service Circular 264* May 1937

THE OPPORTUNITY IN AGRICULTURE FOR THE FARM BOY

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Foreword

The present unusual number of young people on farms has attracted the attention of many extension workers. In this circular an attempt is made to measure the magnitude of this number, point out some of the causes, and raise the question of its significance in an extension program for these young people.

This material indicates that if young people now on the land are to raise the standard of living above that which their parents experienced--

1. Fifty out of every one hundred ultimately will have to become entirely dependent upon a nonagricultural occupation.
2. Twenty-five out of every one hundred will live on farms where the resources within the farm will be so small that to maintain this standard of living they will have to find a part-time nonagricultural job.
3. Twenty-five out of every one hundred will be on farms where there are resources within the farms to maintain a fairly adequate living.

This means that three out of four of these young people ultimately will have to develop some skill in nonagricultural occupations. Therefore, they are interested in the outlook for the different nonagricultural occupations as well as in what training and experience are necessary to succeed in these occupations.

E. Merritt

Eugene Merritt,
Senior Extension Economist.

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*This circular is a revision of E.S.C. 214, entitled "What Is the Opportunity in Agriculture for the Farm Boy?", issued in April 1935.

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The Problem

Most young men on farms are living on farms where there are not the resources within the farm to provide a desirable standard of living, and a large part of the remainder live on farms which, if they were subdivided, could not support an additional family. The young farmer is confronted with two major considerations:

1. What natural characteristics has he that would enable him to succeed in farming?

2. What is the opportunity on his own farm and in agriculture in general?

Surplus on the Land

There are now on farms 2,500,000 more people than there would have been if conditions similar to those in 1920-30 had continued; of this number, 2,000,000 are young people. Since 1931 the large decrease in number of people migrating from farms to cities, and the relatively large proportion returning, have brought about this excess of people on the land.

The census of 1935 reported less than 15 percent of the farmers employing hired help through the first week of January 1935. Out of the farms reporting family farm labor there were two workers in addition to the operator for every three farms. These data roughly indicate the extent of labor employed on farms.

In dealing with the problem of the opportunity for a young man in agriculture, consideration has to be given to the effect of the difference in birth rate among the farm and nonfarm population. The agricultural elements in the population not only reproduce enough individuals to maintain the agricultural population stationary, but about one-half more. The urban birth rate, on the other hand, is so low that it lacks over 20 percent of providing sufficient replacements to maintain the population permanently without accession from outside.

Table 1.--Number of Children Under 5 Years per 1,000 Women 15 to 44 Years of Age, 1930.

7 cities largely American stock	225	Rural nonfarm population	471
All cities over 100,000 population	293	Rural farm population	545
All cities 2,500 to 100,000	341	Leslie County, eastern Kentucky	915

Bur. Agr. Econ. data. (Note.--About 370 children per 1,000 women are necessary to maintain population).

The above table shows how the variations in birth rates affect the replacements in a given group of people.

Replacements

In 1930 there were approximately 40,000,000 males gainfully employed in the United States. About a million are required annually for replacements. Of this number only 200,000 are required for agriculture. In April 1930 there were on farms 400,000 male children 10 years of age but only 200,000 25 years of age. This decrease is due primarily to migration. In the urban areas there were 615,000 males 10 years of age, and practically the same number 25 years of age. In other words, for the same ages the number of young people on farms was about one-half, whereas the number in our urban centers had remained the same. This urban situation apparently is due to the fact that a large number of the young men from the farms moved to cities and also to the fact that there were in the cities large numbers of immigrants from foreign countries and the larger families of such immigrants. With the recent restrictions on immigration the demand for labor from rural areas probably will be increased. The heavy movement of people from abroad to our cities prior to 1914 is showing up in the large number of young people of foreign parentage who are 10 to 15 years of age. By 1937 most of them will be at an age to be gainfully employed. The present generation of young people seeking employment in the city is faced with this competition, but in the future the chances are that this competition will decrease due to the influence of urban environment upon birth rate.

Table 2.--Number of Males at Specified Ages
(based on 1930 census)

Area	10 years	15 years	20 years	30 years	35 years	45 years
Rural:						
Farm............	400,000	374,000	300,000	206,000	189,000	192.000
Nonfarm.........	250,000	212,000	194,000	191,000	189,000	161,000
Urban...............	615,000	568,000	572,000	615,000	662,000	555,000
Total...........	1,265,000	1,154,000	1,066,000	1,012,000	1,040,000	908,000
Foreign born.....	15,000	16,000	42,000	81,000	159,000	183,000
Foreign parents..	210,000	220,000	189,000	157,000	144,000	101,000
Native parents...	334,000	290,000	289,000	308,000	283,000	213,000
Negro............	46,000	36,000	42,000	57,000	65,000	51,000

Rural Migration

Annually during the past 10 or 12 years there have been born on farms over 700,000 babies, and annually during the same period the number of deaths has been slightly over 300,000. In other words, the excess of births over deaths has amounted to practically 400,000. This excess is one-half the total excess for the United States. During this same period in the majority of the years from 1½ to 2 million people have left farms. Of this number a large percent have returned. This movement appears to be an effort at occupational adjustment. The number departing from farms between 1920 and 1924 was 62 percent; of the number returning between 1925 and 1929, 72 percent returned; but between 1930 and 1934, 92 percent returned. Although the movement away from farms was much smaller during the past 6 years the percent returning during 1930-32 has been higher than in any previous year of record. During 1933-35 the percent staying was on a par with the 3 years prior to 1937.

Table 3.--Farm population in United States

Year	Farm population	Births	Arrivals	Deaths	Departures
	Thousands	Thousands	Thousands	Thousands	Thousands
1924	31,056	759	1,581	264	2,068
1925	31,064	707	1,336	285	2,038
1926	30,784	715	1,427	311	2,334
1927	30,281	706	1,705	255	2,162
1928	30,275	708	1,698	304	2,120
1929	30,257	700	1,604	311	2,081
1930	30,169	742	1,611	344	1,823
1931	30,497	741	1,546	334	1,566
1932	30,971	746	1,777	328	1,511
1933	31,693	721	944	326	1,225
1934	31,770	749	700	344	1,051
1935	31,801	727	825	333	1,211
1936	31,809	....	....	....	....

Bur. Agr. Econ. data.

Another factor in the adjustment between the farm and urban population has been difference in death rate. The somewhat higher death rate in the cities shortens the productive years of life, probably by 10 percent when compared with farm people.

In the past the increased efficiency in agricultural production has released additional workers to satisfy increasing labor demands in nonfarming occupations.

Marriage

When a young man marries he usually looks about for a way to earn a living. Under normal farming conditions 48 percent of the boys 16 to 17 years of age are in school, and the larger proportion of the remainder are working at home. Of those 18 to 19 years of age 21 percent are in school. Of those between 20 and 24 years of age the larger proportion are laborers working for a wage, but over one-fourth of the number become farm operators, mostly tenants. The majority of those between 25 and 29 are farm operators-tenants. By the time they have reached their thirtieth to thirty-fourth birthday nearly three-fourths of them are married and have become farm operators.

Table 4.--Males on Farms in United States in 1930
16 to 34 years of age

	In school	Not in school		Total	Married
		Not operators	Farm operators		
	Percent	Percent	Percent	Percent	Percent
16 to 17	48	52	....	100	.....
18 to 19	21	72	7	100	2.2
20 to 24	5	68	27	100	29.2
25 to 29	.....	47	53	100	61.9
30 to 34	.....	31	69	100	76.9

Bur. Census data.

Ages at Which Farm Operators Start

For the past 25 years it has become increasingly difficult for the young man to obtain a farm to operate. In 1910 there were nearly 420,000 farm operators under 25 years of age. By 1930 this had decreased to slightly over 370,000. For the same period the number of farm operators between 25 and 34 years of age had decreased from slightly less than 1,415,000 to nearly 1,050,000. In spite of this decrease in the total number of operators the number of share tenants increased, while the cash tenants and owner operators decreased.

Table 5.--Number of Farm Operators by Ages

Farm operators	Year		
	1930	1920	1910
Under 25 years:			
All owners	47,256	87,400	97,690
Managers..................	2,782	5,484	4,820
Cash tenants..............	30,650	47,480	80,446
Share tenants	290,991	243,316	236,374
Total	371,679	383,680	419,330
25 to 34 years:			
All owners...............	334,789	561,442	620,961
Managers	11,183	17,983	15,700
Cash tenants.............	118,567	183,761	252,299
Share tenants	584,513	569,834	524,916
Total	1,049,052	1,333,020	1,413,876

Bur. Census data.

Available Farms

In 1929 over 3,000,000, or 49 percent, of all the farms enumerated produced less than $1,000 worth of products. These farms contributed only 11 percent of the total value of farm products sold. On 490,000 of these 3,000,000 farms the value of products used exceeded the value of products sold. About 350,000 were farms where the operator was a part-time farmer who worked 150 days or more a year at other occupations. Over a million were cotton farmers, including croppers. In addition to these types there were over a million others on farms scattered throughout the East and Middle West, producing less than $1,000 worth of products for sale. More than one-half of the young people now on farms reside on farms producing less than $1,000 worth of agricultural products.

Table 6.--Farms Classified by Value of Products Sold
United States, 1929

Value of products sold	Number of farms	Cumulative percentage, farms	Cumulative percentage, sales
Under $250	397,517	6.6	0.1
251 - 400	518,092	15.3	1.0
401 - 600	766,118	28.0	3.4
601 - 1,000	1,245,684	48.8	10.8
1,000 - 1,500	937,910	64.4	20.6
1,501 - 2,500	981,163	80.8	38.5
2,501 - 4,000	628,006	91.2	57.7
4,001 - 6,000	291,112	96.1	71.7
6,001 - 10,000	147,753	98.5	82.3
10,001 - 20,000	61,606	99.6	91.0
Over - 20,000	24,981	100.0	100.0

Bur. Agr. Econ. data and Bur. census data.

Farm Population and Farm Income

Another way of looking at the same picture is to compare the proportion of the total population that is dependent upon agriculture with the proportion of the national income that they receive. In 1909 and 1914 between 33 and 35 percent of our people were dependent upon agriculture but were receiving between 16 and 19 percent of the national income. In other words, the relationship between the percentage dependent upon agriculture and the national income was 2 to 1. Since 1929 only 10 percent of the national income has been coming to agriculture, but 25 percent of the people have been dependent upon agriculture for their living. Instead of having a ratio of 2 to 1 the ratio has increased to 2½ to 1.

Table 7.--Farm population and farm income

Year	Population dependent upon agriculture	National income received by agriculture
	Percent	Percent
1909	35	19
1914	33	16
1919	30	20
1924	28	12
1929	25	10
1934	25	10

Bur. Agr. Econ. data.

Effect of Inheritance Upon Income*

"The cost of the contribution which the farming people have made to the productivity and prosperity of the cities, suburbs, and villages is greater than is commonly recognized. If it costs from $2,000 to $2,500 (at predepression prices) to rear and educate the average child on American farms to the age of 15, when he may be assumed to be self-supporting, - and $150 a year does not seem an excessive estimate of the cost of food, clothing, medical services, education, and all the incidental expenses - then the 6,300,000 net migration from the farm during the decade 1920-30 represents a contribution of about $14,000,000,000. This contribution is almost equal to the value of the wheat crop plus half that of the cotton crops during these years.

"Nor is this all. When the farmer and his wife grow old and die, the estate is divided among the children. During the decade 1920-30 about one-fifth of the farmers and their wives died, and their estates were distributed among the children. One-third or more of the children had moved to town and many of those children who remained on the farm had to mortgage it in many cases to pay the brothers and sisters who lived in the cities their share of the estate. A rough estimate indicates that between $3,000,000,000 and $4,000,000,000 was drained from the farms to the cities and villages during the decade 1920-30 incident to the settlement of estates."

Standard of Living on Farms

In discussing the problem confronting these young people the terms inadequate, minimum essential, and mere subsistence are used frequently to designate the type of farming. In this discussion the meaning of the terms as interpreted by the home economist is used. An inadequate or subsistence budget to him means a family budget that does not enable a farm family to send the children to school beyond the grades and to save, take out life insurance, or have an automobile without reducing the other phases of living below the subsistence level; it means a budget that cannot provide them with adequate medical care. A family on such a budget, because of shortage of funds, has a low clothing standard. Home economists consider as mainly in this class those wage-earning families that have less than $1,000 a year for a living. When such factors are applied to a farm family, their budget would be somewhat similar to the one indicated in table 8. The data shown in this table were gathered in three different ways from white farm families, but all within the same county. These families produced the maximum of food and feed, yet it took between $200 and $300 in cash to provide the things for living that they consider they should not have to do without. Farm-management records showed that if after paying farm expenses this sum was not available, these things were purchased anyway, and debts tended to increase.

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*Dr. O. E. Baker. Extension Service Circular 223, The Outlook for Rural Youth. September 1925. Pages 4 and 5.

Table 8.--A typical "inadequate" farm-home budget

Item	Home survey	Fairly adequate farm-home budget	Farm survey	Farm-and-home economic conference
Cash expenditure required:				
Food	$51	($200)	$77	$35 to $50
Clothing	73	(200)	70	80
Education ...	56	(60)	48	35
Recreation ..	25	(60)	9	13
Health	13	(50)	23	25
Church	15	(40)		15
Fuel & light.	14	(50)		12
Furniture ...	3	(40)		20
Personal	5	(40)		15
Life insurance			34	
Total cash ..	255	(740)	261	250
Furnished by farm:				
Food		(360)	372	400
House rent ..		(360)	127	130
Fuel		(40)	31	35
Total furnished by farm		(760)	530	565

The home survey was conducted by members of all the demonstration clubs in the county. The farm-survey data were taken from the individual farm-management records. The farm-and-home economic-conference data were based upon what the farm women attending a county-wide conference indicated were minimum essentials, and the local cost of these essentials. The fairly adequate budget was prepared in a similar economic conference and is approximately what might be considered an average farm budget for United States farms as a whole in comparatively prosperous years. Fairly adequate farm-home budget figures have been inserted in order that comparisons may be made.

A large number of crop reporters who are "white owner-operators" each year report their farm receipts and expenses to the United States Department of Agriculture. Out of their receipts have been deducted most of their farm expenses, and a figure arrived at and designated as net results. Net results is cash the farm family has available to pay for living expenses, interest, and farm improvements. A comparison of the percentage having a net result of less than $1,000 for 1925-29 with those of more recent years will give a partial index of trend in the probable number of farms with $1,000 or less of agricultural products. These data show that in 1925-29, which is also representative of the previous 5 years, 55 percent of these white owner-operator families had less than $1,000 to pay for family living, interest, and farm improvements; in 1931, 75 percent; in 1932, 85 percent; in 1933, over 65 percent; in 1934, 60 percent; in 1935, 72 percent. The majority have been in the inadequate or subsistence type income group. The relative number of white tenants and colored farmers on this type of farms probably would be even higher than among the white owner-operators. If this change in ratio is indicative of the change in this type of farms for 1936, the number probably has increased from 3,000,000 to 4,500,000. However, the change in the purchasing power of the dollar makes a comparison in terms of goods difficult.

Table 9.--Percentage of white owner-operator farmers obtaining net result

Net result	1925-29 Average	1930	1935
Dollars	Percent	Percent	Percent
$499 or less...............	31.46	59.42	49.30
500 - 999...............	22.13	17.23	22.76
1,000 - 1,499...............	15.02	9.41	11.71
1,500 - 1,999...............	9.85	5.38	7.08
2,000 plus.................	21.54	8.56	9.15

Bur. Agr. Econ. data.

Manpower on Farms

It requires between 12,000,000,000 and 15,000,000,000 man-hours to produce our agricultural products. In 1930 there were 9,000,000 males 18 years of age or over gainfully employed at agriculture. If we assume that the males under 18 years of age and the females performed the man-hours in excess of 12,000,000 and that the males 18 years of age worked 8 hours a day, it would mean that the 9,000,000 males were employed effectively only

135 days during the year. If we assume that they could work at least 300 days they were effectively employed for less than half a year.

These data would seem to indicate that, if there was land available and males over 18 years of age were effectively employed, there is sufficient manpower now on farms to cultivate at least twice our present agricultural acreage of crops and to take care of a like amount of farm animals.

Stated in terms of percentage the available manpower on farms is only 50 percent effectively employed, or it might be stated that 50 percent of the manpower available on farms is now wasted.

Part-time Employment

The number of farmers who in 1929 or 1934 reported employment during the year at jobs not connected with the home farm was approximately 2,000,000, or over 30 percent of the total number of operators. The average was 100 days per operator reporting. Apparently the number of operators so employed increased slightly and the average number of days per operator remained practically the same.

Table 10.--Days employed off the farm as reported by farm operators 1929 and 1934

Days of work off farm	Number of operators 1929	Number of operators 1934	Number of days 1929 Total	Number of days 1929 Average	Number of days 1934 Total	Number of days 1934 Average
nder 25	516,102	595,472	6,243,742	12	(1)	(1)
5 to 49	328,068	360,628	10,657,622	32		
) to 74	217,032)	235,277	12,351,723	57	(1)	(1)
5 to 99	118,427)	125,325	9,924,608	84		
00 to 149	183,080)	188,815	20,028,067	109		
50 to 199	143,485)	159,336	23,279,486	162	(1)	(1)
00 to 249	129,400)	115,667	26,727,362	207		
49 or over	267,304	296,954	80,655,778	302		
Total...........	1,902,898	2,077,474	189,868,388	100	202,208,247	98

Bur. Census data.
1.--Data not available.

Agricultural Land Needed

It requires from 285 to 290 million acres of cropland to supply our present population with the food products they consume. If we add to this another 20 to 25 million acres needed to supply nonfood products, we obtain a total of 305 to 315 million acres for domestic food and nonfood requirements. If we then accept our 5-year average crop acreage (1928-32) of 360 to 370 million acres to be a reasonable measure of our effective crop area, we have a difference of 50 to 55 million acres.

In the period from 1925 to 1929, when our population was about 5 percent smaller than it is at present, we actually exported the products of 60 to 70 million acres. During the depression period 1931-33 exports decreased and the products of 40 to 50 million acres were shipped abroad.

If we take a long point of view and allow for an increasing population, we probably shall need all this crop area for which there is now no immediate prospective market, and some in addition if we increase our exports above the present level. If we continue to export cotton and other products we should need 25 years hence a total harvested-crop area of 370 to 390 million acres, which is somewhat larger than the recent harvested acreage.

Changes in Number of Farm Units in the Past

Following previous depressions there were available large areas of agricultural lands which were not being used for agricultural purposes. We find that following the depression of the 1870's between censuses there was an increase of 50 percent in the number of farms, and following the depression of the nineties an increase of nearly 26 percent. In both these periods the land area in farms increased nearly one-third.

Table 11.--Changes in number of farms and in farm acreage

Census year	Number of farms	Increase over previous census	Acres in farms	Increase over previous census	Acres cropped
		Percent		Percent	
1860...	2,044,077	41.1	407,213,000	38.7	
1870...	2,659,985	30.1	407,735,000	0.1	
1880...	4,008,907	50.7	536,082,000	31.5	
1890...	4,564,641	13.9	623,219,000	16.3	
1900...	5,737,372	25.7	838,592,000	34.6	
1910...	6,361,502	10.9	878,798,000	4.8	
1920...	6,448,343	1.4	955,884,000	8.8	
1930...	6,288,648	2.6-	986,771,000	3.2	359,224,000
1935...	6,812,350	8.4	1,054,515,000	6.8	295,624,000

Bur. Census data.

Between 1930 and 1935, the number of farms increased largely around the larger cities in the Appalachian regions, and in the poor-soil area in the Great Lakes regions. Although the total area in farms increased during the same period the cropped area decreased nearly 18 percent.

Four Major Assumptions

First assumption.

That all young men stay on the land and become dependent upon agriculture for their living. This would mean that by 1940 we should probably have a million more young men than in 1930 clamoring to become, or had already become, operators and about half a million more farm laborers, mostly at home on their parents' farms. There would be an equal number of young women. This would mean an increase in the number of people dependent upon the return from agricultural products, and a lowering of their standard of living.

Second assumption.

If it is assumed that all the young people now on farms stayed there and that the standard of living for the group as a whole was maintained or raised, they would require three to four times as many days at jobs not connected with a farm operated as in 1929 or in 1934, and these part-time jobs would have to be provided largely in the densely populated rural areas where few opportunities exist at present. This would mean that part-time jobs would have to be furnished to an extent that would be equivalent to the amount of time devoted to the various occupations in population as large as in New York City.

Third assumption.

Another assumption might be that these people will stay on the land and that an effort will be made to provide them with an adequate living through increased agricultural exports. If these farm people earned a living the equivalent to that enjoyed in 1925 to 1929 it would mean that they would have to produce agricultural products coming from 60 million acres of corn, wheat, cotton, and other crops. That would mean about 100,000,000 acres of crops produced for export if this acreage were to be added to that already devoted to production for export.

Fourth assumption.

The fourth assumption might be that industry would absorb the excess farm population. Many of those who are studying the industrial outlook feel that by 1940 most industries will have fully regained their former impetus, that more people will be enjoying the kind of goods already produced, that there will be increased efficiency in production and lower prices, and that many new goods may be brought into existence. If this assumption gives a clue to what farm young people are facing, it means that for at least 5 years, and maybe for 10, they will be backed up on the farms, that the migration from the farm to the city will not attain its normal magnitude until after 1940, and that by 1950 all the surplus now on the land will be needed by decentralized industries or by industries in large cities. The United States has the resources, plants, and people available in this country to raise the standard of living to new high levels. Just what adjustments finally will be made between agriculture and industry are not known. It is hoped that they will be such as to raise the standard of living in both groups.

What happens in nonagricultural occupations ultimately will determine the number of men dependent upon agriculture and the standard of living on farms. The challenge before the extension worker is to help to prepare the young people now on the land to be ready either to fill the nonagricultural jobs as they become available or to settle on farms where there is a possibility of earning a decent living either entirely from the farm or by supplementing farming with a part-time nonagricultural job.

DISTRIBUTION: A copy of this circular has been sent to each State extension director; State and assistant State leader in county agricultural, home demonstration, and club work; county agricultural, home demonstration, and club agent; subject-matter specialist in agricultural economics, rural sociology, home management and furnishing; agricultural-college library; and experiment-station library.

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The Opportunity in Agriculture for the Farm Boy

Eugene Merritt

UNITED STATES DEPARTMENT OF AGRICULTURE
Extension Service .... C. W. WARBURTON *Director*
Division of Cooperative Extension...... .... C. B. SMITH *Chief*
Washington, D.C.